

# WIRE ROPE LUBRICATION

## VIPER MKII WIRE ROPE LUBRICATOR



### Mini Viper MKII

Suitable for ropes 8mm to 35mm

Our new Mini Viper MKII completes the range, providing a light weight, easy to use option for smaller or hard to access wire ropes.

#### [ KIT CONTENTS ]

- Mini-Viper MKII High Strength Collar
- 50:1 High Speed High Flow Pump with flow regulator
- 4m High Pressure 1/4" Hydraulic Hose with quick connect couplings (For Lubricant Delivery)
- Retaining Ratchet Straps (rated 500kg) & Shackles
- 1m Clear Return Hose
- Drum Cover and Follower Plate
- Aluminum Storage Case

#### [ AUXILIARY PARTS ]

- Mini-Viper Polyurethane Seals, per pair
- Viper Wire Rope Cleaner

(Refer to Viper Seals, Scrapers & Rope Cleaner Selection Guide)

#### [ APPLICATIONS ]

- Construction & service cranes
- Deck winches
- Anchor ropes
- Mobile cranes

PRODUCT CODE	PACKING SIZE
VIPERMINI	MINI - VIPER MKII KIT WITH PUMP FOR 20KG PAIL



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## Features and Benefits for Mini Viper MKII

- **FAST EFFICIENT ROPE LUBRICATION**

Reduced downtime associated with rope lubrication which improves equipment availability.  
Speeds up to 1,000 m/hour

- **ELIMINATES MANUAL GREASING**

Less labour intensive and safer operations, reduces lubricant wastage and mess

- **MAXIMUM ROPE PROTECTION**

Unique seal design induces lubricant penetration into rope for added corrosion protection,  
direct increase in rope asset life

- **HIGH PRESSURE / HIGH FLOW GREASE PUMP**

Optimizes grease penetration, displaces moisture from rope core and complete coverage  
even for bigger ropes

- **COMPACT & LIGHTWEIGHT**

Mini MKII collar with seals weigh only 2.5kg, making it one of the lightest and easiest to use



## Viper MKII Technology – Key Components



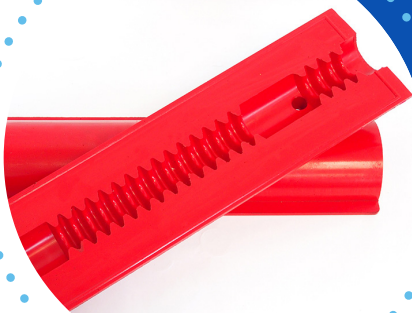
### Viper MKII Collar

The NEW MKII Collar is constructed from high-grade cast aluminum alloy with a robust corrosion resistant coating, completed with stainless steel hardware to outlast severe working environments. While maintaining its strength, the improved design is 32% lighter than its predecessor. It also comes complete with built-in handles, making it easy to be carried and fitted to the rope by one person.

### Viper Grease Pump

The new MKII WRL Lubricator Kit includes an upgraded grease pump, built specifically for Viper WRL systems. It comes complete with air-regulator, air-filters and double control valves to enable better and safer operations.

The standard 50:1 High Pressure High Flow Pump delivers up to 2.5kg/min of grease. The grease pump comes complete with Drum Cover, Carry Handle, Follower Plate and 4m High Pressure Lubricant Delivery Hose.



### Viper Polyurethane Seals

Viper Polyurethane Seal is the heart of Viper WRL Systems and effective lubrication. Its unique seal design and carefully tested polyurethane-blend material allows the lubricant to effectively penetrate into the core of wire ropes, where corrosion is most critical and often undetected.

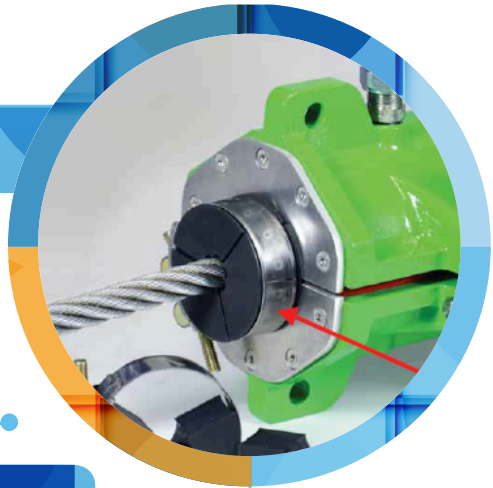
Viper MKII Seals have also been field-tested and improved to be extremely durable and wear resistant, while retaining its flexibility to achieve best "grease massaging" effects into wire rope core. The new Viper MKII Seals can last up to 12,000 – 15,000m of rope lubrication.



## Viper MKII Technology – Key Components

### Viper Rope Cleaner

Viper Rope Cleaners enable the removal of contamination or built-up old lubricant from the wire rope prior to lubrication, thus improving the effectiveness of the lubrication process. The Rope Cleaners provides more thorough cleaning of ropes than the Scraper Plates as it is designed to follow closely to the contours of the wire rope strands.



#### THERE ARE 2 TYPES OF VIPER ROPE CLEANERS

##### Viper Groove Rope Cleaner:

closely shaped to the wire rope strands (i.e. no. of strands, lay direction) to thoroughly clean debris, even those stuck within wire groove valleys

##### Viper Smooth Bore Rope Cleaner:

used on ropes where groove valleys are minimal (e.g. multi-strand, non-rotational ropes, ROV cables, etc)







ACTUAL ROPE SIZE	SEAL PART NO. Viper Rope Seals for "6 and "8 Strand Ropes	SEAL PART NO. Viper Rope Seals for Armoured and Multi Strand Ropes	VIPER SMOOTH BORE ROPE CLEANER	VIPER ROPE CLEANER "6 STRAND ROPES"		VIPER ROPE CLEANER "8 STRAND ROPES"	
				RIGHT LAY	LEFT LAY	RIGHT LAY	LEFT LAY
8mm to 10mm 5/16" to 3/8"	VMISEAL8	VMISEAL10	VRC-SB9	N/A	N/A	N/A	NA
11mm to 12mm 7/16" to 15/32"	VMISEAL10	VMISEAL13	VRC-SB11	N/A	N/A	N/A	NA
13mm to 14mm ½" to 9/16"	VMISEAL13	VMISEAL14	VRC-SB13	N/A	N/A	N/A	NA
15mm to 16mm 19/32" to 5/8"	VMISEAL14	VMISEAL16	VRC-SB15	VRC16-6R	VRC16-6L	N/A	NA
17mm to 18mm 21/32 to 11/16"	VMISEAL16	VMISEAL18	VRC-SB17	VRC18-6R	VRC18-6L	N/A	NA
19mm to 20mm ¾" to 25/32"	VMISEAL18	VMISEAL20	VRC-SB19	VRC20-6R	VRC20-6L	N/A	NA
21mm to 22mm 13/16" to 7/8"	VMISEAL20	VMISEAL22	VRC-SB21	VRC-22-6R	VRC22-6L	N/A	NA
23mm to 24mm 29/32" to 15/16"	VMISEAL22	VMISEAL24	VRC-SB23	VRC24-6R	VRC24-6L	VRC24-8R	VRC24-8L
25mm to 26mm 1" to 1 1/32"	VMISEAL24	VMISEAL26	VRC-SB25	VRC26-6R	VRC26-6L	VRC26-8R	VRC26-8L
27mm to 28mm 1 1/16" to 1 1/8"	VMISEAL26	VMISEAL28	VRC-SB27	VRC28-6R	VRC28-6L	VRC28-8R	VRC28-8L
29mm to 30mm 1 5/32" to 1 3/16"	VMISEAL28	VMISEAL30	VRC-SB29	VRC30-6R	VRC30-6L	VRC30-8R	VRC30-8L
HIGH SPEED KIT ONLY							
31mm to 33mm 1 ¼" to 1 5/16"	VMISEAL30	VMISEAL33	VRC-SB32	VRC32-6R	VRC32-6L	VRC32-8R	VRC32-8L
34mm to 35mm 1 11/32" to 1 3/8"	VMISEAL33	VMISEAL35	VRC-SB34	VRC34-6R	VRC34-6L	VRC34-8R	VRC34-8L

# WIRE ROPE LUBRICATION

## VIPER MKII WIRE ROPE LUBRICATOR

### Mid Viper MKII

Suitable for ropes 8mm to 65mm

The original Mid Viper MKII is now acknowledged as the leading WRL in the world, delivering superior performance on a wide range of rope sizes and types

#### [ KIT CONTENTS ]

- Mid-Viper MKII High Strength Collar
- Viper High Volume Grease Pump
- 45:1 High Speed High Flow Pump with flow regulator
- 4m High Pressure ½" Hydraulic Hose with quick connect coupling (For Lubricant Delivery)
- 1m Clear Lubricant Drain Hose (For excess lubricant)
- Retaining Ratchet Straps & Shackles
- Drum Cover and Follower Plate
- Convenient Carrying Strap (For Collar)
- Aluminum Storage Case

#### [ AUXILIARY PARTS ]

- Mid-Viper Polyurethane Seals, per pair
- Mid-Viper Scraper Plate, per set of 4
- Viper Wire Rope Cleaner

(Refer to Viper Seals, Scrapers & Rope Cleaner Selection Guide)

#### [ APPLICATIONS ]

- Wharf cranes
- Rov cables
- Ship loaders
- Ship cranes
- Mine winders
- Tow ropes
- Oil and gas platforms

PRODUCT CODE	PACKING SIZE
VIPER20MKII	MID - VIPER MKII KIT WITH PUMP FOR 20KG PAIL
VIPER180MKII	MID - VIPER MKII KIT WITH PUMP FOR 180KG DRUM



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## Features and Benefits for Mid Viper MKII

- **FAST EFFICIENT ROPE LUBRICATION**

Reduced downtime associated with rope lubrication which improves equipment availability.  
Speeds up to 1,000 m/hour

- **ELIMINATES MANUAL GREASING**

Less labour intensive and safer operations, reduces lubricant wastage and mess

- **MAXIMUM ROPE PROTECTION**

Unique seal design induces lubricant penetration into rope for added corrosion protection,  
direct increase in rope asset life

- **HIGH PRESSURE / HIGH FLOW GREASE PUMP**

Optimizes grease penetration, displaces moisture from rope core and complete coverage  
even for bigger ropes

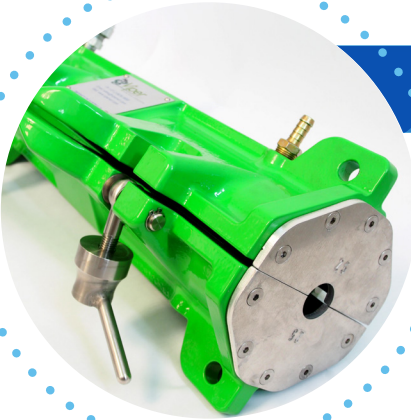
- **WIDE SIZE RANGE**

The full Viper WRL range lubricates rope sizes from 8mm up to 65mm





## Viper MKII Technology – Key Components



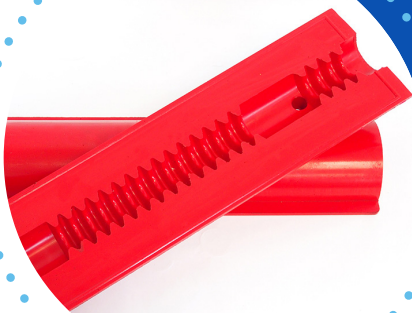
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### Viper Grease Pump

The new MKII WRL Lubricator Kit includes an upgraded grease pump, built specifically for Viper WRL systems. It comes complete with air-regulator, air-filters and double control valves to enable better and safer operations.

The standard 45:1 High Pressure High Flow Pump delivers up to 5kg/min of grease. The grease pump comes complete with Drum Cover, Carry Handle, Follower Plate and 4m High Pressure Lubricant Delivery Hose.



### Viper Polyurethane Seals

Viper Polyurethane Seal is the heart of Viper WRL Systems and effective lubrication. Its unique seal design and carefully tested polyurethane-blend material allows the lubricant to effectively penetrate into the core of wire ropes, where corrosion is most critical and often undetected.

Viper MKII Seals have also been field-tested and improved to be extremely durable and wear resistant, while retaining its flexibility to achieve best "grease massaging" effects into wire rope core. The new Viper MKII Seals can last up to 12,000 – 15,000m of rope lubrication.

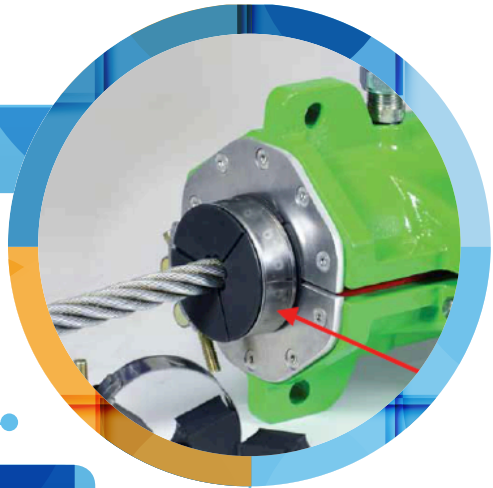




## Viper MKII Technology – Key Components

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Viper Rope Cleaners enable the removal of contamination or built-up old lubricant from the wire rope prior to lubrication, thus improving the effectiveness of the lubrication process. The Rope Cleaners provides more thorough cleaning of ropes than the Scraper Plates as it is designed to follow closely to the contours of the wire rope strands.



#### THERE ARE 2 TYPES OF VIPER ROPE CLEANERS

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closely shaped to the wire rope strands (i.e. no. of strands, lay direction) to thoroughly clean debris, even those stuck within wire groove valleys

##### Viper Smooth Bore Rope Cleaner:

used on ropes where groove valleys are minimal (e.g. multi-strand, non-rotational ropes, ROV cables, etc)



### Viper Scraper Plates

Aluminum Scraper Plates are fixed to the ends of Mid-Viper MKII and MAXI-Viper MKII units. It serves to scrap off surface contaminants on wire rope prior fresh lubrication and also protect the seals from potential damage of protruding broken strands by flattening loose wires.



ACTUAL ROPE SIZE	Viper Rope Seals for "6 and "8 Strand Ropes		Viper Rope Seals/Scraper for Amoured & Multi Stand Ropes Only		VIPER SMOOTH BORE ROPE CLEANER	VIPER ROPE CLEANER "6 STRAND ROPES"		VIPER ROPE CLEANER "8 STRAND ROPES"	
	SEAL PART NO.	SCRAPER NO.	SEAL PART NO.	SCRAPER NO.		RIGHT LAY	LEFT LAY	RIGHT LAY	LEFT LAY
8mm to 10mm 5/16" to 3/8"	VSEAL8	VSC10	VSEAL10	VSC10	VRC-SB9	N/A	N/A	N/A	NA
11mm to 12mm 7/16" to 15/32"	VSEAL10	VSC12	VSEAL13	VSC12	VRC-SB11	N/A	N/A	N/A	NA
13mm to 14mm ½" to 9/16"	VSEAL13	VSC14	VSEAL14	VSC14	VRC-SB13	N/A	N/A	N/A	NA
15mm to 16mm 19/32" to 5/8"	VSEAL14	VSC16	VSEAL16	VSC16	VRC-SB15	VRC16-6R	VRC16-6L	N/A	NA
17mm to 18mm 21/32 to 11/16"	VSEAL16	VSC18	VSEAL18	VSC18	VRC-SB17	VRC18-6R	VRC18-6L	N/A	NA
19mm to 20mm ¾" to 25/32"	VSEAL18	VSC20	VSEAL20	VSC20	VRC-SB19	VRC20-6R	VRC20-6L	N/A	NA
21mm to 22mm 13/16" to 7/8"	VSEAL20	VSC22	VSEAL22	VSC22	VRC-SB21	VRC-22-6R	VRC22-6L	N/A	NA
23mm to 24mm 29/32" to 15/16"	VSEAL22	VSC24	VSEAL24	VSC24	VRC-SB23	VRC24-6R	VRC24-6L	VRC24-8R	VRC24-8L
25mm to 26mm 1" to 1 1/32"	VSEAL24	VSC26	VSEAL26	VSC26	VRC-SB25	VRC26-6R	VRC26-6L	VRC26-8R	VRC26-8L
27mm to 28mm 1 1/16" to 1 1/8"	VSEAL26	VSC28	VSEAL28	VSC28	VRC-SB27	VRC28-6R	VRC28-6L	VRC28-8R	VRC28-8L
29mm to 30mm 1 5/32" to 1 3/16"	VSEAL28	VSC30	VSEAL30	VSC30	VRC-SB29	VRC30-6R	VRC30-6L	VRC30-8R	VRC30-8L
31mm to 33mm 1 ¼" to 1 5/16"	VSEAL30	VSC34	VSEAL33	VSC34	VRC-SB32	VRC32-6R	VRC32-6L	VRC32-8R	VRC32-8L
34mm to 35mm 1 11/32" to 1 3/8"	VSEAL33	VSC36	VSEAL35	VSC36	VRC-SB34	VRC34-6R	VRC34-6L	VRC34-8R	VRC34-8L

# Mid-Viper MkII

## Seal - Scraper - VRC - Selection Guide



ACTUAL ROPE SIZE	Viper Rope Seals for "6 and "8 Strand Ropes		Viper Rope Seals/Scraper for Amoured & Multi Stand Ropes Only		VIPER SMOOTH BORE ROPE CLEANER	VIPER ROPE CLEANER "6 STRAND ROPES"		VIPER ROPE CLEANER "8 STRAND ROPES"	
	SEAL PART NO.	SCRAPER NO.	SEAL PART NO.	SCRAPER NO.		RIGHT LAY	LEFT LAY	RIGHT LAY	LEFT LAY
36mm to 38mm 1-13/32" to-1 ½"	VSEAL35	VSC38	VSEAL38	VSC38	VRC-SB37	VRC38-6R	VRC38-6L	VRC38-8R	VRC38-8L
39mm to 41mm 1-17/32" to 1-19/32"	VSEAL38	VSC41	VSEAL41	VSC41	VRC-SB39	VRC40-6R	VRC40-6L	VRC40-8R	VRC40-8L
42mm to 44mm 1-5/8" to 1-¾"	VSEAL41	VSC44	VSEAL44	VSC44	VRC-SB43	VRC44-6R	VRC44-6L	VRC44-8R	VRC44-8L
45mm to 46mm 1-25/32" to 1-13/16"	VSEAL44	VSC46	VSEAL46	VSC46	VRC-SB45	VRC46-6R	VRC46-6L	VRC46-8R	VRC46-8L
47mm to 48mm 1-27/32" to 1-7/8"	VSEAL46	VSC48	VSEAL48	VSC48	VRC-SB47	VRC48-6R	VRC48-6L	VRC48-8R	VRC48-8L
49mm to 50mm 1-15/16" to 1-31/32"	VSEAL48	VSC50	VSEAL50	VSC50	VRC-SB49	VRC50-6R	VRC50-6L	VRC50-8R	VRC50-8L
51mm to 53mm 2" 2-3/32"	VSEAL50	VSC53	VSEAL53	VSC53	VRC-SB52	VRC52-6R	VRC52-6L	VRC52-8R	VRC52-8L
54mm to 55mm 2-1/8"n to 2-5/32"	VSEAL53	VSC55	VSEAL55	VSC55	VRC-SB54	VRC54-6R	VRC54-6L	VRC54-8R	VRC54-8L
56mm 58mm 2-3/16" to 2-9/32"	VSEAL55	VSC58	VSEAL58	VSC58	VMRC-SB57	VMRC58-6R	VMRC58-6L	VMRC58-8R	VMRC58-8L
59mm to 60mm 2-5/16" to 2-3/8"	VSEAL58	VSC60	VSEAL60	VSC60	VMRC-SB59	VMRC60-6R	VMRC60-6L	VMRC60-8R	VMRC60-8L
61mm to 63mm 2-13/32" to 2-½"	VSEAL60	VSC63	VSEAL63	VSC63	VMRC-SB62	VMRC62-6R	VMRC62-6L	VMRC62-8R	VMRC62-8L
64mm to 65mm 2-½" to 2-9/16"	VSEAL63	VSC65	VSEAL65	VSC65	VMRC-SB64	VMRC64-6R	VMRC64-6L	VMRC64-8R	VMRC64-8L
66mm to 67mm 2-19/32" to 2-5/8"	VSEAL65	VSC67	n/a	n/a	VMRC-SB66	VMRC66-6R	VMRC66-6L	VMRC66-8R	VMRC66-8L

Mid-Viper MkII

Seal - Scraper - VRC - Selection Guide



# WIRE ROPE LUBRICATION

## VIPER MKII WIRE ROPE LUBRICATOR



### MAXI Viper MKII

Suitable for ropes 50mm to 165mm

The MAXI Viper MKII is the largest WRL on the market, ensuring even the largest and most critical wire ropes can be safely and effectively lubricated

#### [ KIT CONTENTS ]

- MAXI-Viper MKII High Strength Collar with dual-inlet
- 45:1 High Speed High Flow Pump with flow regulator
- 10m High Pressure ½" Hydraulic Hose with quick connect coupling (For Lubricant Delivery)
- 1m Clear Lubricant Drain Hose (For excess lubricant)
- Retaining Ratchet Straps & Shackles
- Drum Cover and Follower Plate
- Aluminum Storage Case

#### [ AUXILIARY PARTS ]

- MAXI-Viper Polyurethane Seals, per pair
- MAXI-Viper Scraper Plate, per set of 4
- Viper Wire Rope Cleaner

(Refer to Viper Seals, Scrapers & Rope Cleaner Selection Guide)

#### [ APPLICATIONS ]

- Underwater offshore wire ropes
- Rov cables
- Tensioner cables
- Vessel crane ropes

PRODUCT CODE	PACKING SIZE
VIPERMAXIMKII	MAXI - VIPER MKII KIT WITH PUMP TO SUIT 180KG PAIL
VIPERMAXIMKII - HF	MAXI - VIPER MKII KIT WITH EXTRA HIGH SPEED PUMP TO SUIT 180KG DRUM



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## Features and Benefits for MAXI Viper MKII

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Speeds up to 1,000 m/hour

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- **MAXIMUM ROPE PROTECTION**

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- **HIGH PRESSURE / HIGH FLOW GREASE PUMP**

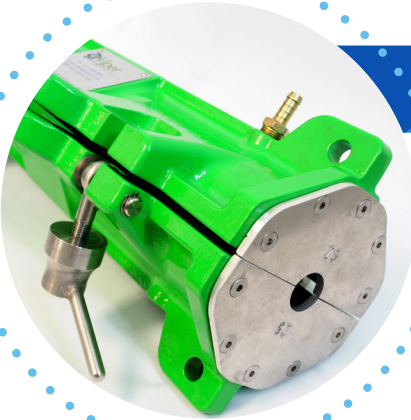
Optimizes grease penetration, displaces moisture from rope core and complete coverage  
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- **WIDE SIZE RANGE**

The full Viper WRL range lubricates rope sizes from 8mm up to 165mm



## Viper MKII Technology – Key Components



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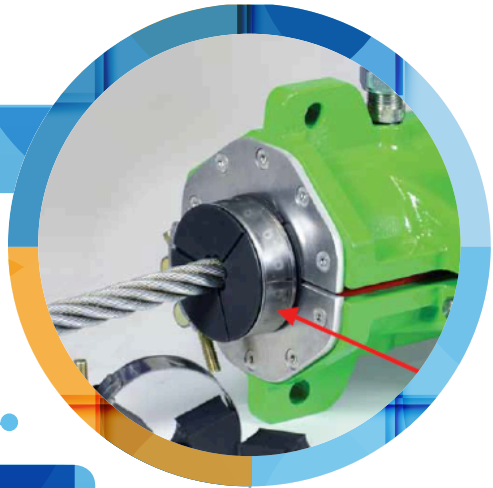
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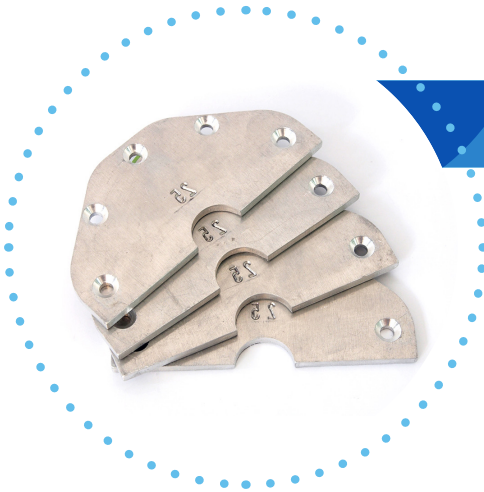
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### Viper Scraper Plates

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# MAXI-Viper MkII

## Seal - Scraper - VRC - Selection Guide

ACTUAL ROPE SIZE	Viper Rope Seals for "6 and "8 Strand Ropes		Viper Rope Seals/Scraper for Amoured & Multi Strand Ropes Only		VIPER SMOOTH BORE ROPE CLEANER	VIPER ROPE CLEANER "6 STRAND ROPES"		VIPER ROPE CLEANER "8 STRAND ROPES"	
	SEAL PART NO.	SCRAPER NO.	SEAL PART NO.	SCRAPER NO.		RIGHT LAY	LEFT LAY	RIGHT LAY	LEFT LAY
49mm to 50mm 1-15/16" to 1-31/32"	VMMSEAL48	VMMSC50	VMMSEAL50	VMMSC50	VRC-SB49	VRC50-6R	VRC50-6L	VRC50-8R	VRC50-8L
51mm to 53mm 2" to 2-3/32"	VMMSEAL50	VMMSC53	VMMSEAL53	VMMSC53	VRC-SB52	VRC52-6R	VRC52-6L	VRC52-8R	VRC52-8L
54mm to 55mm 2-1/8" to 2-5/32"	VMMSEAL53	VMMSC55	VMMSEAL55	VMMSC55	VRC-SB54	VRC54-6R	VRC54-6L	VRC54-8R	VRC54-8L
56mm to 58mm 2-3/16" to 2-3/32"	VMMSEAL55	VMMSC58	VMMSEAL58	VMMSC58	VMRC-SB57	VMRC58-6R	VMRC58-6L	VMRC58-8R	VMRC58-8L
59mm to 60mm 2-5/16" to 2-3/8"	VMMSEAL58	VMMSC60	VMMSEAL60	VMMSC60	VMRC-SB59	VMRC60-6R	VMRC60-6L	VMRC60-8R	VMRC60-8L
61mm to 63mm 2-13/32" to 2-1/2"	VMMSEAL60	VMMSC63	VMMSEAL63	VMMSC63	VMRC-SB62	VMRC62-6R	VMRC62-6L	VMRC62-8R	VMRC62-8L
64mm to 65mm 2-1/2" to 2-9/16"	VMMSEAL63	VMMSC65	VMMSEAL65	VMMSC65	VMRC-SB64	VMRC64-6R	VMRC64-6L	VMRC64-8R	VMRC64-8L
66mm to 67mm 2 19/32" to 2 5/8"	VMMSEAL65	VMMSC67	VMMSEAL68	VMMSC67	VMRC-SB66	VMRC66-6R	VMRC66-6L	VMRC66-8R	VMRC66-8L
68mm to 70mm 2-21/32" to 2-3/4"	VMMSEAL68	VMMSC70	VMMSEAL70	VMMSC70	VMRC-SB69	VMRC70-6R	VMRC70-6L	VMRC70-8R	VMRC70-8L
71mm to 73mm 2-13/16" to 2-7/8"	VMMSEAL70	VMMSC73	VMMSEAL74	VMMSC73	VMRC-SB72	VMRC72-6R	VMRC72-6L	VMRC72-8R	VMRC72-8L
74mm to 75mm 2 27/32" to 2 15/16"	VMMSEAL74	VMMSC75	VMMSEAL76	VMMSC75	VMRC-SB74	VMRC74-6R	VMRC74-6L	VMRC74-8R	VMRC74-8L
76mm to 77mm 2-31/32" to 3"	VMMSEAL76	VMMSC77	VMMSEAL78	VMMSC77	VMRC-SB76	VMRC76-6R	VMRC76-6L	VMRC76-8R	VMRC76-8L
78mm to 79mm 3 3/64" to 3 5/64"	VMMSEAL78	VMMSC79	VMMSEAL80	VMMSC79	VMRC-SB78	VMRC78-6R	VMRC78-6L	VMRC78-8R	VMRC78-8L
80mm to 82mm 3-1/8" to 3-13/64"	VMMSEAL80	VMMSC82	VMMSEAL83	VMMSC82	VMRC-SB80	VMRC82-6R	VMRC82-6L	VMRC82-8R	VMRC82-8L
83mm to 85mm 3-15/64" to 3-5/16"	VMMSEAL83	VMMSC85	VMMSEAL86	VMMSC85	VMRC-SB84	VMRC84-6R	VMRC84-6L	VMRC84-8R	VMRC84-8L





# MAXI-Viper MkII

## Seal - Scraper - VRC - Selection Guide

ACTUAL ROPE SIZE	Viper Rope Seals for "6 and "8 Strand Ropes		Viper Rope Seals/Scraper for Amoured & Multi Stand Ropes Only		VIPER SMOOTH BORE ROPE CLEANER	VIPER ROPE CLEANER "6 STRAND ROPES"		VIPER ROPE CLEANER "8 STRAND ROPES"	
	SEAL PART NO.	SCRAPER NO.	SEAL PART NO.	SCRAPER NO.		RIGHT LAY	LEFT LAY	RIGHT LAY	LEFT LAY
86mm to 88mm 3-23/64" to 3-7/16"	VMMSEAL86	VMMSC88	VMMSEAL90	VMMSC88	VMRC-SB87	VMRC88-6R	VMRC88-6L	VMRC88-8R	VMRC88-8L
89mm to 91mm 3-15/32" to 3-1/2"	VMMSEAL90	VMMSC91	VMMSEAL92	VMMSC91	VMRC-SB90	VMRC90-6R	VMRC90-6L	VMRC90-8R	VMRC90-8L
92mm to 94mm 3-21/32" to 3-5/8"	VMMSEAL92	VMMSC94	VMMSEAL94	VMMSC94	VMRC-SB93	VMRC92-6R	VMRC92-6L	VMRC92-8R	VMRC92-8L
94mm to 95mm 3-11/16" to 3-11/16"	VMMSEAL94	VMMSC94	VMMSEAL96	VMMSC94	VMRC-SB94	VMRC94-6R	VMRC94-6L	VMRC94-8R	VMRC94-8L
96mm to 97mm 3-3/4" to 3-13/16"	VMMSEAL96	VMMSC97	VMMSEAL98	VMMSC97	VMRC-SB96	VMRC96-6R	VMRC96-6L	VMRC96-8R	VMRC96-8L
98mm to 99mm 3-7/32" to 3-7/8"	VMMSEAL98	VMMSC99	VMMSEAL100	VMMSC99	VMRC-SB98	VMRC98-6R	VMRC98-6L	VMRC98-8R	VMRC98-8L
100mm to 102mm 3-29/32" to 3-15/16"	VMMSEAL100	VMMSC102	VMMSEAL103	VMMSC102	VMRC-SB101	VMRC102-6R	VMRC102-6L	VMRC102-8R	VMRC102-8L
103mm to 105mm 4" to 4-3/32"	VMMSEAL103	VMMSC105	VMMSEAL106	VMMSC105	VMMRC-SB104	VMMRC104-6R	VMMRC104-6L	VMMRC104-8R	VMMRC104-8L
106mm to 108mm 4-1/8" to 4-7/32"	VMMSEAL106	VMMSC108	VMMSEAL109	VMMSC108	VMMRC-SB107	VMMRC108-6R	VMMRC108-6L	VMMRC108-8R	VMMRC108-8L
109mm to 111mm 4-1/4" to 4-9/32"	VMMSEAL109	VMMSC111	VMMSEAL112	VMMSC111	VMMRC-SB110	VMMRC110-6R	VMMRC110-6L	VMMRC110-8R	VMMRC110-8L
112mm to 114mm 4 3/8" to 4 7/16"	VMMSEAL112	VMMSC111	VMMSEAL115	VMMSC111	VMMRC-SB113	VMMRC112-6R	VMMRC112-6L	VMMRC112-8R	VMMRC112-8L
115mm to 116mm 4-1/2" to 4-17/32"	VMMSEAL115	VMMSC116	VMMSEAL117	VMMSC116	VMMRC-SB115	VMMRC116-6R	VMMRC116-6L	VMMRC116-8R	VMMRC116-8L
117mm to 119mm 4-9/16" to 4-5/8"	VMMSEAL117	VMMSC119	VMMSEAL120	VMMSC119	VMMRC-SB118	VMMRC118-6R	VMMRC118-6L	VMMRC118-8R	VMMRC118-8L
120mm to 122mm 4-11/16" to 4-3/4"	VMMSEAL120	VMMSC122	VMMSEAL123	VMMSC122	VMMRC-SB121	VMMRC122-6R	VMMRC122-6L	VMMRC122-8R	VMMRC122-8L



# MAXI-Viper MkII

## Seal - Scraper - VRC - Selection Guide

ACTUAL ROPE SIZE	Viper Rope Seals for "6 and "8 Strand Ropes		Viper Rope Seals/Scraper for Amoured & Multi Stand Ropes Only		VIPER SMOOTH BORE ROPE CLEANER	VIPER ROPE CLEANER "6 STRAND ROPES"		VIPER ROPE CLEANER "8 STRAND ROPES"	
	SEAL PART NO.	SCRAPER NO.	SEAL PART NO.	SCRAPER NO.		RIGHT LAY	LEFT LAY	RIGHT LAY	LEFT LAY
123mm to 125mm 4-13/16" to 4-7/8"	VMMSEAL123	VMMSC125	VMMSEAL126	VMMSC125	VMMRC-SB124	VMMRC124-6R	VMMRC124-6L	VMMRC124-8R	VMMRC124-8L
126mm to 128mm 4-15/16" to 5"	VMMSEAL126	VMMSC128	VMMSEAL129	VMMSC128	VMMRC-SB127	VMMRC128-6R	VMMRC128-6L	VMMRC128-8R	VMMRC128-8L
129mm to 131mm 5-1/32" to 5-7/64"	VMMSEAL129	VMMSC131	VMMSEAL132	VMMSC131	VMMRC-SB130	VMMRC130-6R	VMMRC130-6L	VMMRC130-8R	VMMRC130-8L
132mm to 134mm 5-1/8" to 5-1/4"	VMMSEAL132	VMMSC134	VMMSEAL135	VMMSC134	VMMRC-SB133	VMMRC134-6R	VMMRC134-6L	VMMRC134-8R	VMMRC134-8L
135mm to 137mm 5-9/32" to 5-5/16"	VMMSEAL135	VMMSC137	VMMSEAL138	VMMSC137	VMMRC-SB136	VMMRC136-6R	VMMRC136-6L	VMMRC136-8R	VMMRC136-8L
138mm to 140mm 5-3/8" to 5-7/16"	VMMSEAL138	VMMSC140	VMMSEAL141	VMMSC140	VMMRC-SB139	VMMRC140-6R	VMMRC140-6L	VMMRC140-8R	VMMRC140-8L
141mm to 143mm 5-1/2" to 5-9/16"	VMMSEAL141	VMMSC143	VMMSEAL144	VMMSC143	VMMRC-SB142	VMMRC142-6R	VMMRC142-6L	VMMRC142-8R	VMMRC142-8L
144mm to 146mm 5-5/8" to 5-11/16"	VMMSEAL144	VMMSC146	VMMSEAL147	VMMSC146	VMMRC-SB145	VMMRC146-6R	VMMRC146-6L	VMMRC146-8R	VMMRC146-8L
147mm to 149mm 5-3/4" to 5-13/16"	VMMSEAL147	VMMSC149	VMMSEAL150	VMMSC149	VMMRC-SB148	VMMRC148-6R	VMMRC148-6L	VMMRC148-8R	VMMRC148-8L
150mm to 152mm 5-7/8" to 5-15/16"	VMMSEAL150	VMMSC152	VMMSEAL153	VMMSC152	VMMRC-SB151	VMMRC152-6R	VMMRC152-6L	VMMRC152-8R	VMMRC152-8L
153mm to 155mm 6" to 6-1/16"	VMMSEAL153	VMMSC155	VMMSEAL156	VMMSC155	VMMRC-SB154	VMMRC154-6R	VMMRC154-6L	VMMRC154-8R	VMMRC154-8L
156mm to 158mm 6-3/32" to 6-3/16"	VMMSEAL156	VMMSC158	VMMSEAL159	VMMSC158	VMMRC-SB157	VMMRC158-6R	VMMRC158-6L	VMMRC158-8R	VMMRC158-8L
159mm to 161mm 6-1/4" to 6-5/16"	VMMSEAL159	VMMSC161	VMMSEAL162	VMMSC161	VMMRC-SB160	VMMRC160-6R	VMMRC160-6L	VMMRC160-8R	VMMRC160-8L
162mm to 165mm 6-3/8" to 6-1/2"	VMMSEAL162	VMMSC165	VMMSEAL165	VMMSC165	VMMRC-SB163	VMMRC164-6R	VMMRC164-6L	VMMRC164-8R	VMMRC164-8L